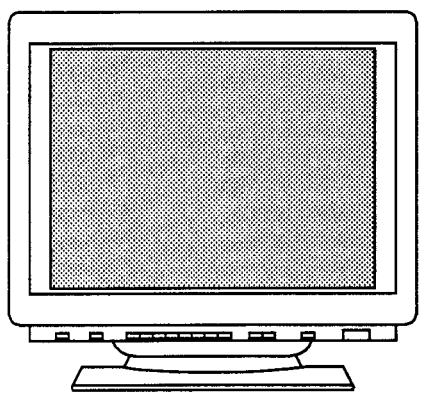
HITACHI

COLOR MONITOR

CM2198M/ME
CM2098M/ME

USER MANUAL



For future references, record the serial number of your display monitor. SERIAL No. _____
The serial number is located on the rear of the monitor.

READ THE INSTRUCTION INSIDE CAREFULLY.
KEEP THIS USER'S MANUAL FOR FUTURE REFERENCES.

energy

EPA POLLUTION PREVENTER

MADE FROM 100% RECYCLED PAPER

USER MANUAL 2

BEDIENUNGSANLEITUNG 19

MANUAL DE USUARIO 36

GEBRUIKSAANWIJZING 52

MODE D'EMPLOI 68

ENGLISH

DEUTSCH

ESPAÑOL

DUTCH

FRANÇAIS

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NOTICE

The information in this manual is subject to change without notice. Hitachi assumes no responsibility for any errors that may appear in this manual.

TRADEMARK ACKNOWLEDGMENT

VGA is a registered trademark of International Business Machines Corporation.

APPLE is a registered trademark of Apple Computer, Inc..

VESA is a trademark of a nonprofit organization, Video Electronics Standard Association.

CAUTIONS

NEVER REMOVE THE BACK COVER !

The back cover MUST be removed only by authorized service personnel. This display monitor contains high voltage components.

BE CAREFUL OF STATIC ELECTRICITY ON CRT SURFACE !

To prevent electrical shock by the static electricity on the CRT surface, disconnect the power cord at least 30 SECONDS AFTER turning off the power.

BE CAREFUL OF GENERATED MAGNETISM !

After the power has been turned on or "DEGAUSS" button has been pressed, the CRT is demagnetized for approximately 10 seconds. This generates a strong magnetic field around the bezel which may affect the data stored on magnetic tape or disks near the bezel. Place such magnetic recording equipment and tapes/disks apart from this unit.

AVOID FREQUENT POWER ON-OFF SWITCHING !

DO NOT repeat OFF and ON in a short period. It may cause blurred colors or distortion of the displayed pattern.

REMOVE THE POWER CORD FOR COMPLETE SEPARATION !

For complete separation from the power source, remove the power cord from the monitor or from the wall outlet.

AMBIENT ILLUMINATION !

Avoid direct rays of the sun or room lighting onto the CRT surface in order to prevent eye fatigue.

ABOUT CLEANING

This monitor has a non-glare and anti-electrostatic treatment on the CRT surface.
Use water or alcoholic solvent with soft cloth like gauze to clean the CRT surface.

NEVER use abrasive, glass cleaner containing highly concentrated ammonia and strong base chemicals since they damage the CRT surface treatment.

Clean the cabinet and controls with a lightly moistened soft cloth.
DO NOT use aerosol sprays, solvents or abrasive cleaners.

ENGLISH

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FEATURES

The following features are provided by the Hitachi Color Monitor CM2198M/2098M.

Sharpest Focus and Highest Contrast

Flat screen CRT with anti-glare, dynamic focus circuit, dark glass, and an INVAR shadow mask gives the sharpest focus and highest contrast to minimize eye fatigue.

Wide-range Multi-Scanning

Automatic scanning and automatic adjustment to conform with a wide range of scanning frequencies and user requirements.

Digital Picture Control Function

Size, position, trapezoid, rotation and side pincushion are adjustable by digital controls.
Geometry setting can be stored for different H/V frequencies.
Microprocessor-based preset functions can store 31 sets of geometry settings including the standard factory settings.

Dual Signal Input

Dual signal input allows BNC cables as well as D-Sub miniature 15 pin connector for all types of graphics cards.

Digital Color Control Function

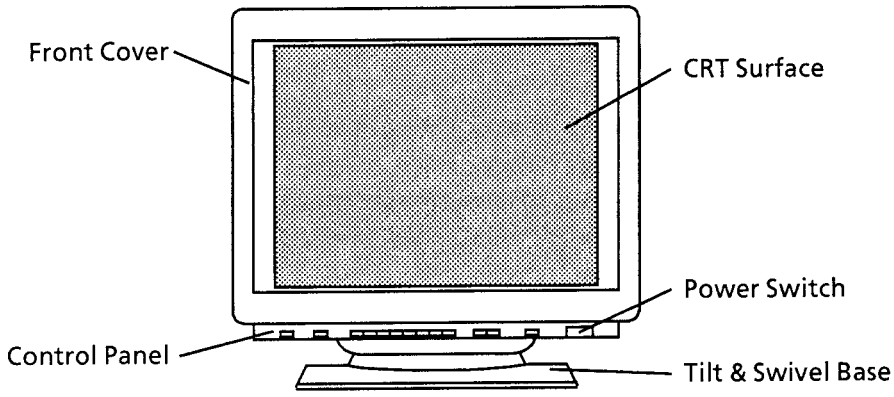
Red, green and blue color balance is adjustable by digital control.
Adjusted color setting can be stored and recalled by the color select button.

Power Saving System

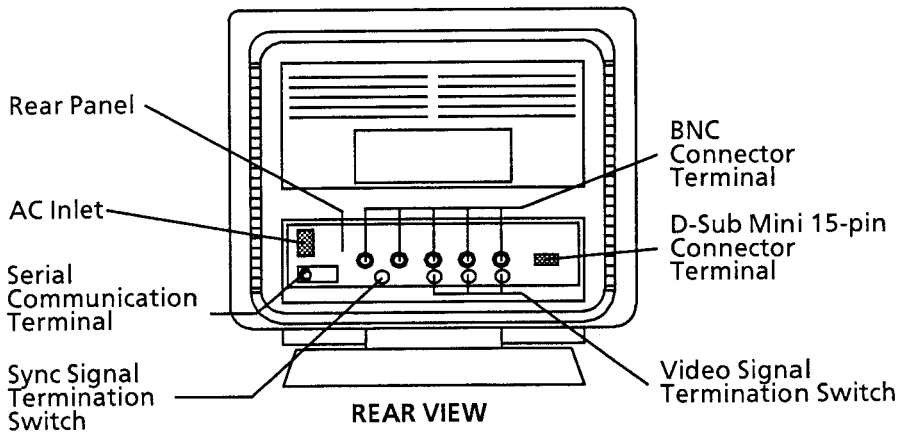
The Environmental Protection Agency has established a voluntary program by which manufacturers enable computer products to go into low power states while not being used. This monitor has a low power "sleep"mode, which is compliant with the EPA requirements for the "Energy Star" program, and will assist you in conserving energy. Please refer to the section of "Power Saving System" for details.

INSTALLATION

Install the monitor in the following way, taking care to maintain safety.



FRONT VIEW



REAR VIEW

1. Installation

- Install the monitor on a horizontal base.

NOTICE

INSTALL THE UNIT IN ADEQUATE ENVIRONMENT !

DO NOT expose this monitor to rain or moisture to prevent electric shock or fire hazard.
This unit is designed to be used in an office or business environment.
DO NOT subject the unit to vibrations, dust, or corrosive gases.

KEEP IN A WELL-VENTILATED PLACE !

DO NOT cover this monitor or place anything against any sides (not only top, right and left side but also rear and bottom side) of unit. Ventilation holes are provided at all sides of the back cover to prevent the temperature from rising.

KEEP AWAY FROM HEATING RADIATION OR SOURCE !

AVOID placing the unit in direct sunshine or near a heating appliance.

BE CAREFUL OF MAGNETIC FIELDS !

DO NOT place a magnet, loudspeaker system, floppy disk drive, printer, or anything which will generate magnetism near the unit. A magnetic field may cause blurred colors or distortion of the displayed pattern.

2. Power Cord Connection

- Make sure the Power Switch is "OFF".
- Connect a power cord to the "AC Inlet" of the monitor.
- Connect the plug of the power cord to a receptacle of the correct voltage.

NOTICE

- In USA/Canada, use a UL LISTED/CSA LABELLED or CERTIFIED power cord set meeting the following specifications.

  Rating: min. 125V, 7A Length: max. 3.1m Type: SVT or SJT
  Plug type: NEMA 5-15P, Parallel blade, Grounding type, 125V, 15A

  Failure to do so may cause fire or electric shock hazard.

  In Europe, a proper European standard approved power cord is to be used with this monitor. For a rated current up to 6 A, a type not lighter than H05VV-F 3G 0.75 mm^2 or H05VVH2-F 3G 0.75 mm^2 shall be used.

- The accessory power cord shall be used if provided.

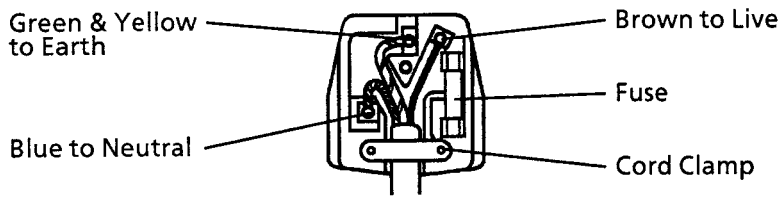
- Use only the correct voltage power outlet with safety ground connection.
  100 - 120 V for USA, Canada, etc.
  200 - 240 V for Europe. etc.
  (This monitor automatically selects the input voltage 100 - 120/ 200 - 240V.)
- The receptacle should be close to the monitor and easily accessible.

FOR THE CUSTOMERS IN U.K.

THIS PRODUCT IS SUPPLIED WITH A TWO PINMAINS PLUG FOR USE IN MAINLAND EUROPE. FOR THE U.K. PLEASE REFER TO THE NOTES ON THIS PAGE.

NOTE:
ELECTRICAL CONNECTION
Your monitor requires an electrical supply of 240 volts - 50 hertz and should be protected by a 5 amp fuse. Your equipment is supplied with a plug incorporating a 5 amp fuse fitted to the mains lead. If the plug that is fitted to the equipment is not suitable for your socket outlet, it must be cut off and the appropriate plug fitted. The cut off plug should be disposed of, do not insert it into a 13 amp socket to prevent the hazard of electric shocks. With plugs not incorporating a fuse, the circuit must be protected by 5 amp fuse.

WARNING: THIS EQUIPMENT MUST BE EARTHED
IMPORTANT:
Your equipment is supplied with a mains lead, the wires of which are colored in accordance with the following code: Green and Yellow - Earth, Blue - Neutral, Brown - Live.



As the colors of the wires in your mains lead in this equipment may not correspond with the markings identified with the terminals of your plug, proceed as follows:

The wires which are colored Green and Yellow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol ⏚ or colored Green or Green and Yellow.

The wire which is colored Brown must be connected to the terminal which is marked with the letter L or colored Red.

The wire which is colored Blue must be connected to the terminal which is marked N or colored Black.

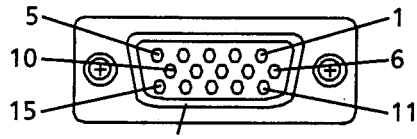
The plug moulded onto the cord incorporates a fuse. For replacement, use a 5 amp BS1362 fuse. Only ASTA approved fuses should be used. The fuse cover/carrier must be refitted when changing the fuse. In the event of losing the fuse cover/carrier, the plug must not be used until a replacement has been obtained from your nearest electrical stockist and fitted. the color of the fuse cover/carrier is that of the colored marks on the insert in the base of the plug.

3. Signal Cable Connection

Connect either the D-Sub miniature 15-pin connector or a set of BNC connectors, or both.

- D-Sub Mini 15-pin Connector

D-Sub Mini 15-pin Connector Terminal

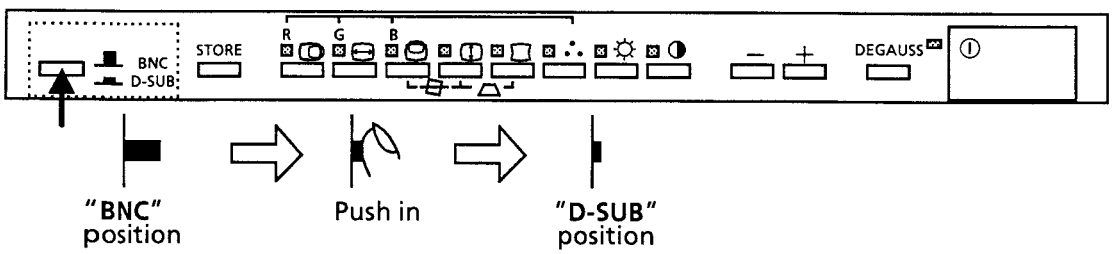


Shell (connected to Frame Ground)

TABLE 1

Pin No.	Signal	Pin No.	Signal	Pin No.	Signal
1	Red Video	6	Red Ground	11	Ground
2	Green Video (Sync. optional)	7	Green Ground	12	No Connection
3	Blue Video	8	Blue Ground	13	H.Sync. (or H./V. Composite)
4	Ground	9	No Connection	14	V.Sync.
5	No Connection	10	Ground	15	No Connection

- Use an optional signal cable for a VGA-type graphics board.
- Connect the connector to the "D-Sub Mini 15-pin Connector Terminal", and secure the screws on the connector shell firmly.
- Set the "Signal Input Selection Switch" to the "D-SUB" position .



- BNC Connector

BNC Connector Terminals

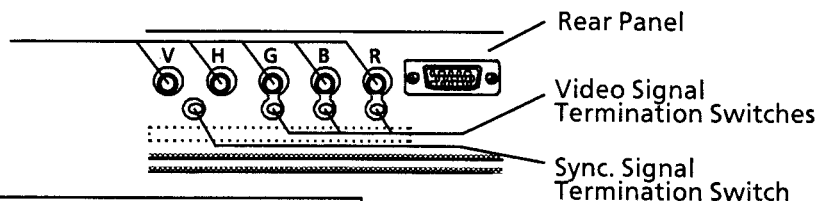


TABLE 2

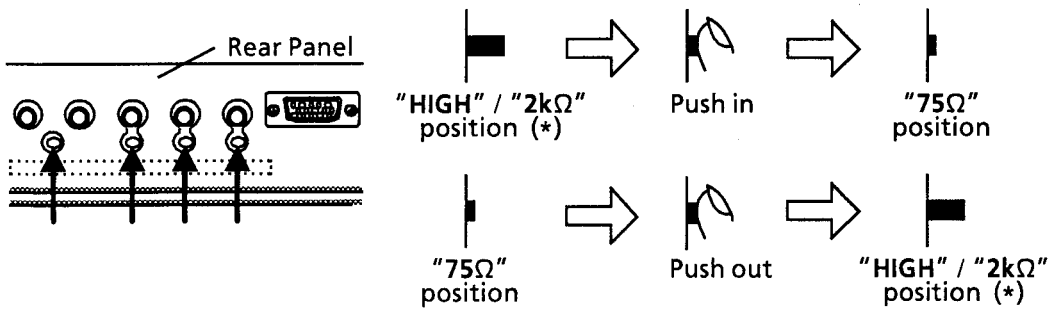
Terminal	Signal
R	Red Video
B	Blue Video
G	Green Video (Sync. optional)
H	H.Sync. (or H./V. Composite)
V	V.Sync.

- Connect double-shielded coaxial cables with BNC connectors to the terminals of the monitor, as shown in TABLE 2.

TABLE 3

Sync. Signal Type	Required Number of Cables	Subject Terminal	Priority
H., V. Separate Sync.	5	R, B, G, H, V	1
H / V Composite Sync.	4	R, B, G, H	2
Sync. on Green Video	3	R, B, G	3

- If the graphics board supplies more than one type of sync. signal, the sync. signal type will be automatically selected by the monitor, with the priority shown in **TABLE 3** .
- Set three "Video Signal Termination Switches" and a "Sync. Signal Termination Switch" of the monitor to the appropriate positions. Set to the "75Ω"position, except for monitors at midway point of loop-through signal transmission. (Factory set position is "75Ω".)

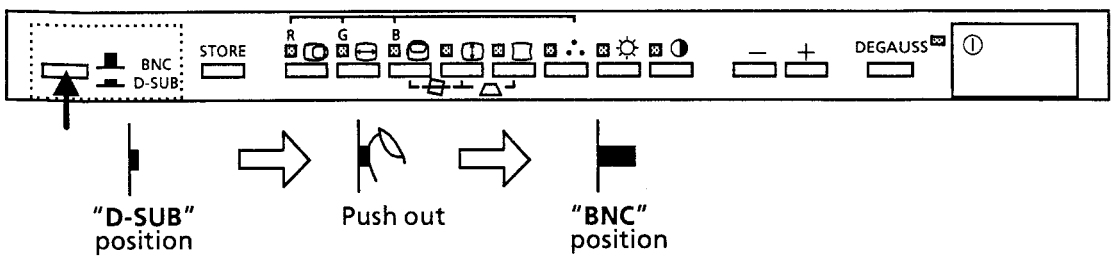


(*) "HIGH" for "Video Signal Termination Switches", "2kΩ" for a "Sync. Signal Termination Switch".

NOTICE:

1. If "Video Signal Termination Switches" are not set to the appropriate position, color and brightness may become wrong; besides, the quality of the picture may become poor.
2. If the "Sync. Signal Termination Switch" is not set to the appropriate position or the sync. frequency is not in the specified range (shown in "**SPECIFICATION - Synchronization**"), the picture may be muted.
3. "Video Signal Termination Switches" and a "Sync. Signal Termination Switch" are available only when "BNC" position is selected with "Signal Input Selection Switch".

- Set "Signal Input Selection Switch" to "BNC" position .



4. Power On

- Turn the Power Switch of the monitor (refer to "**OPERATION - Power Switch**") on first, then the computer.

NOTICE:

If the picture doesn't appear, turn OFF the power switch, make sure of the following, wait at least 30 seconds, and turn it back ON.

1. Make sure the power switch of the computer, power cord connection, signal cable connection, the signal input selection switch of the monitor, and the input sync. signal are right.
2. Set the sync. signal termination switch to "2kΩ" position, if the "BNC" position is selected with the signal input selection switch, and "75Ω" termination is selected with the sync. signal termination switch.

STANDARD SETTINGS

Microprocessor-based preset functions can store 31 sets of geometry settings including the standard settings. 7 sets are preset at factory, 24 sets are available to users.

The following industrial standard settings have been preprogrammed by the factory.

No.	Video Mode Name (with Resolution and Vertical Frequency)	Clock Frequency	Horizontal Frequency	Display Area (Width×Height)
1	VGA-3 640 × 480 - 60Hz	25.18 MHz	31.47 kHz	305×230 mm
2	VESA 640 × 480 - 72Hz	31.50 MHz	37.86 kHz	305×230 mm
3	VESA 800 × 600 - 72Hz	50.00 MHz	48.08 kHz	305×230 mm
4	VESA 1024 × 768 - 70Hz	75.00 MHz	56.48 kHz	305×230 mm
5	VESA 1024 × 768 - 75Hz	80.00 MHz	60.24 kHz	305×230 mm
6	APPLE 1152 × 870 - 75Hz	100.00 MHz	68.68 kHz	305×230 mm
7	CAD 1280 × 1024 - 74Hz	135.00 MHz	78.86 kHz	290×230 mm

Note:

1. Input signals with approximately the same frequencies may be regarded as the same signal.
2. The following horizontal timing conditions are recommended.
   Horizontal front porch should be more than 0.1μs.
   Horizontal sync. width should be more than 1.0μs.
   Horizontal back porch should be more than 1.2μs.
   Horizontal blanking width should be more than 3.5μs.
3. The following vertical timing conditions are recommended.
   Vertical blanking width should be more than 450μs.
   Vertical back porch should be more than 400μs.

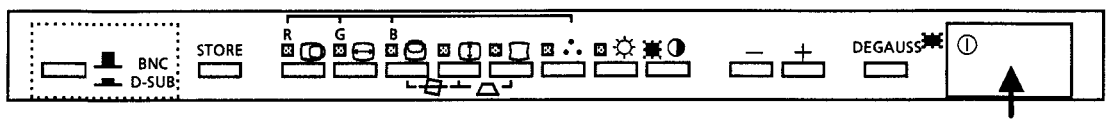
OPERATION

See the "Control Panel" at front of the monitor. You can adjust the picture position, size, side pincushion, trapezoid, color balance, brightness and contrast of the monitor with these buttons.

□ If two or more buttons are pressed at the same time, they will be invalid except when mentioned in the following.

1. FUNCTION OF CONTROLS

Power Switch [ⓘ]



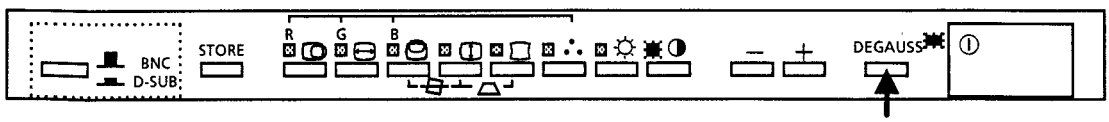
- Power is switched ON or OFF by pushing this button.

  When the power is ON,

  - ▸ The power LED will lights.
  - ▸ The picture position, size, side pincushion, trapezoid, color balance, brightness and contrast of the monitor will be adjusted automatically.
    (refer to "**Automatic Settings**")
  - ▸ The contrast adjustment mode will be set, and the contrast LED will light.

  □ If all LEDs light continuously or the power LED blinks, make sure the power switch of the computer, signal cable connection, the signal input selection switch of the monitor, and the input sync. signal are right. For the use of BNC connector, make sure the video signal termination switches and sync. signal termination switch is right, as well.
  The monitor will recover rapidly when the monitor receives a right sync. signal.

Degauss Button [DEGAUSS]

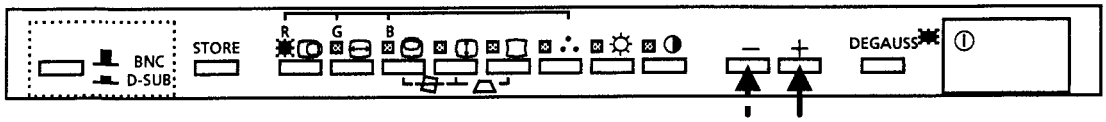


- The manual degaussing function is activated by pressing this button.

  - ▸ Use the degauss button only when you see color impurities on the screen after turning the monitor ON. Remember, the monitor is automatically degaussed during initial power on.

  □ Wait for about 10 minutes before repeating the function.

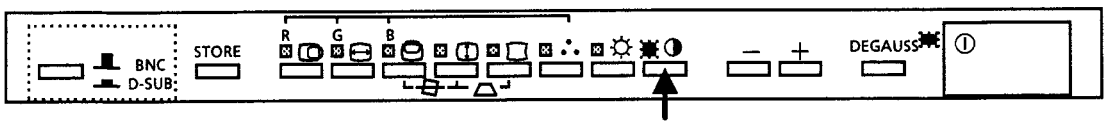
Increase / Decrease Button [+] / [–]



- The [+] / [–] button increases/decreases the value of any selected item during adjustment.
  - ▸ Pressing the [+] / [–] button has different results according to the item selected.

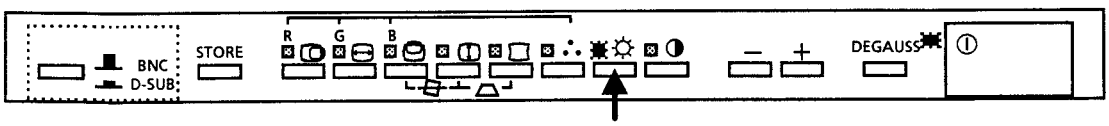
    For instance, the picture will be shifted right by pressing the [+] button when the horizontal position button [ ] is selected. Details are described in later sections.

Contrast Button [◑]



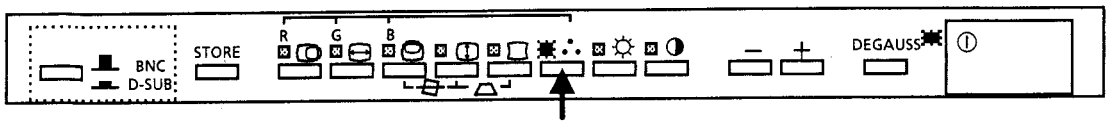
- To adjust contrast.
  - ▸ When the contrast button is pressed, the contrast LED will light indicating you are in the contrast mode. Pressing the [+] / [–] button in this mode will adjust contrast. The contrast LED will flash if it has reached its limit.
    [+] ... makes the display brighter, excluding the background.
    [–] .. makes the display darker, excluding the background.
  - □ About 10 seconds after finishing adjustment, the settings of contrast, brightness and color balance selection will be stored, and the contrast mode will be selected automatically as a default.

Brightness Button [☼]



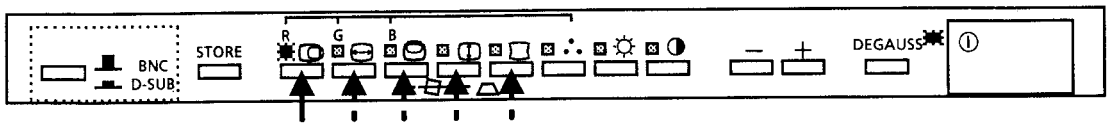
- To adjust brightness.
  - ▸ When the brightness button is pressed, the brightness LED will light. Pressing the [+] / [–] button in this mode will adjust brightness. The brightness LED will flash if it has reached its limit.
    [+] ... makes the display brighter, including the background.
    [–] .. makes the display darker, including the background.
  - □ About 10 seconds after finishing adjustment, the setting of brightness will be stored with the settings of contrast and color balance selection, and the contrast mode will be selected automatically as a default.

Color Button [∴]



- Indicates the color balance selection No.
  - When the color button is pressed, the color LED will indicate the color balance selection No. Flashing once indicates the standard color balance No. 1. Flashing twice indicates the standard color balance No. 2. Flashing three times indicates the user color balance if available.
    The color balance selection No. can be changed by pressing the [+] / [−] button.
    Refer to "**Color Balance Selection**" section for detail.
- Selects a color to be adjusted. (with [◯]/[⊖]/[⊜] Button)
  - Refer to "**Color Adjustment**" section.

Geometry Adjust Button [◯]/[⊖]/[⊜]/[↕]/[□]



- To adjust geometry (horizontal position, horizontal size, vertical position, vertical size, side pincushion and trapezoid).
  - When a geometry adjust button is pressed, the LED of the button pressed will light. Pressing the [+] / [−] button in this mode will make the appropriate adjustment. The LED will flash if it has reached its limit.

Horizontal position [◯]
[+] ... moves the display position to the right.
[−] .. moves the display position to the left.

Horizontal Size [⊖]
[+] ... expands the display horizontally.
[−] .. shrinks the display horizontally.

Vertical position [⊜]
[+] ... moves the display position up.
[−] .. moves the display position down.

Vertical Size [↕]
[+] ... expands the display vertically.
[−] .. shrinks the display vertically.

Side pincushion [□]
[+] ... curves the left/right sides of the display outwards.
[−] .. curves the left/right sides of the display inwards.

Trapezoid [↕] & [□] at the same time = [⏢]
[+] ... expands the top side and shrinks the bottom side.
[−] .. shrinks the top side and expands the bottom side.

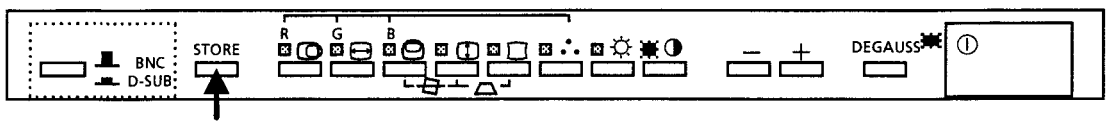
- ▸ Press the store button to store your settings, after adjustment. It will be restored, when the same video mode is used. (refer to "**Store Button**")

  Rotation [ ] & [ ] at the same time = [ ]
  [+] ... rotates the whole image clockwise.
  [–] ... rotates the whole image counterclockwise.

- ▸ Press the store button to store your setting for your monitor.

- □ About 10 seconds after finishing adjustment, the contrast mode will be selected automatically, but then the adjusted geometry settings will be not stored without pressing the store button.

Store Button [STORE]



Stores the followings, simultaneously.

- The current geometry settings.
  - ▸ The setting data by your adjustment according to section "**Geometry Adjust Buttons**", will be stored to the current video mode, and it will be restored to the picture automatically when the same video mode is used.
  - ▸ Remember, only one setting is allowed for each video mode. Therefore, when a setting is stored for a signal which already has a stored setting, the new setting will be stored, and the old will be lost.
  - ▸ Initially, there are standard geometry settings for 7 standard video modes. (refer to "**Standard Settings**") The user settings can be stored to up to 24 video modes.
  - □ The video mode is distinguished by the horizontal/vertical frequency and polarity of horizontal/vertical sync. signal.
    When the video modes are almost similar in above factors, however, these video modes may not be discriminated as different.
  - □ Storing the setting for 25th video mode will delete the oldest user setting.
- The user adjusted color balance.
  - ▸ The setting data by your adjustment according to section "**Color Adjust Buttons**" below, will be stored or restored, as the user color balance.
- The current contrast, brightness and color balance selection No.
  - ▸ The setting data by your adjustment according to sections "**Contrast Button**", "**Brightness Button**", and "**Color Balance Selection**" will be restored.

    On the other hand, contrast, brightness and color balance selection No. are will be stored automatically about 10 seconds after finishing adjustment. Therefore it is normally not necessary to store them manually.
  - □ Store them manually by pressing the store button, if you will turn OFF the monitor before the period of 10 seconds, and you want to keep them.

2. THE OTHER FUNCTIONS

Automatic Settings

- When the monitor is powered on and connected to a video source, the unit will automatically adjust the followings.
  - ▸ Contrast, brightness and color balance.
  - ▸ Geometry (position, size, side pincushion and trapezoid), on the video mode.
  - ▸ Degaussing.

No Signal Alarm Function

- When the monitor does not receive a right sync. signal, all LEDs will light.
  - ▸ In this case, make sure the power switch of the computer, the signal cable connection, the signal input selection switch of the monitor, and the input sync. signal are right.
    This alarm will be cancelled when the monitor receives a right sync. signal.

Power Saving Function

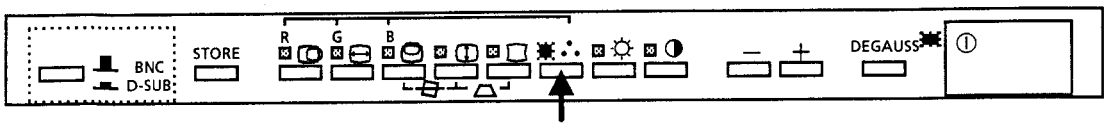
- The power saving mode is automatically set, after the continuous NO SYNC. signal condition of 10 seconds.
  - ▸ Power consumption is less than 5W (approx. 3W), in OFF mode.
  - ▸ The power LED blinks, but the other LEDs neither light nor blink, in this mode.
  - ▸ The monitor will recover rapidly when the right sync. signal is received, because the CRT heater is pre-heated during this mode.

"This monitor is Energy Star compliant when used with a computer equipped with DPMS."

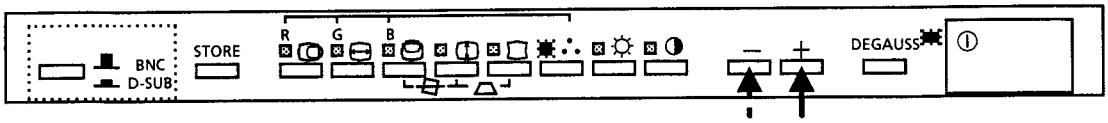
The Video Muting Function

- If the input video sync. signal changes, the muting circuit operates and mutes the picture.
  - ▸ This function hides scrambled images which may appear during the changing period of the input signal.
  - □ The muting period depends on the time that takes until the replaced signal becomes stable.

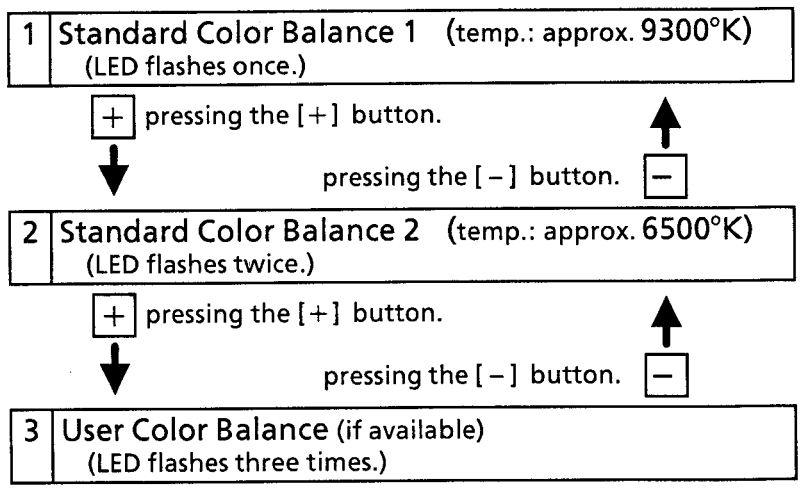
Color Balance Selection



- When the color button is pressed, the color LED will show you the current color balance selection No. (Refer to "**Color button**" section.)
- You have a choice of two standard color balance settings No.1 and No.2. And one user color balance setting No.3 is available if you have already stored your own color adjustment. Storing user color balance is described in "**Color Adjustment**" section.



- While the color LED lights alone, pressing the [+] / [–] button will change the color balance.
  Pressing the [–] button will change the color balance from No.3 (if available) to No.2, and from No.2 to No.1 only. Pressing the [+] button will change the color balance from No.1 to No.2, and from No.2 to No.3 (if available) only.

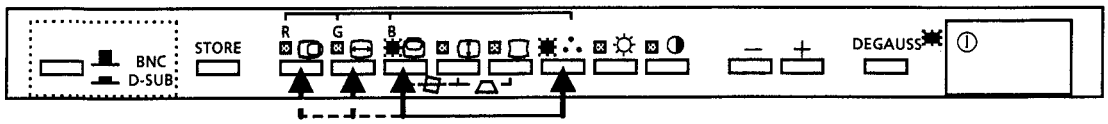

1 Standard Color Balance 1 (temp.: approx. 9300°K)
(LED flashes once.)
+ pressing the [+] button.
pressing the [–] button. –
2 Standard Color Balance 2 (temp.: approx. 6500°K)
(LED flashes twice.)
+ pressing the [+] button.
pressing the [–] button. –
3 User Color Balance (if available)
(LED flashes three times.)

□ About 10 seconds after finishing adjustment, the setting of color balance selection will be stored with the settings of contrast and brightness, and the contrast mode will be selected automatically as a default.

Color Adjustment

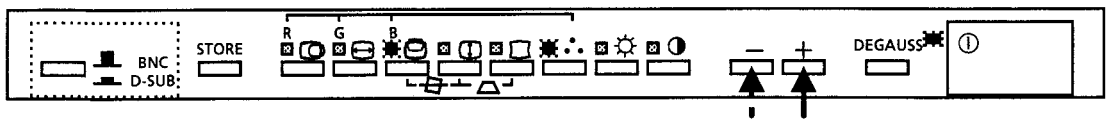
Your own color balance can be set by adjusting each color components of red, green and blue.

- Color Selection [∴] & [R]/[G]/[B]



▸ When the color button [∴] and one of [R] / [G] / [B] buttons are pressed, two LEDs of the button pressed will light. [R] / [G] / [B], corresponds to red/green/blue with [∴].

- Color Balance Adjustment [+] / [–]



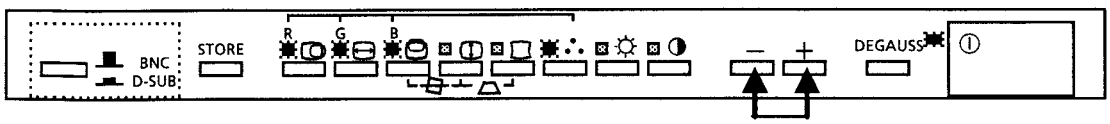
▸ While the LEDs indicating red, green, or blue light, the monitor is the color adjustment mode, and you can adjust each color by [+] / [–] button.
The LED will flash if it has reached its limit.
[+] ... makes the selected color stronger.
[–] .. makes the selected color weaker.

▸ Press the store button to store your settings, after adjustment. It will be stored to the user color balance (No.3) and it can be selected anytime afterwards. (refer to "**Store Button**")

▸ When any button other than color adjustment buttons are pressed, or when there is no key input for about 10 seconds, the color adjustment mode will be cancelled.

□ The adjusted color settings are not stored without pressing the store button.

- Color Reset [+ & –] (in the color selection mode)

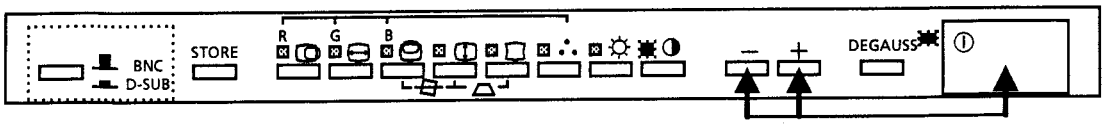


▸ When you want to cancel the currently adjusting color balance, not stored, and recall the previously stored color balance, keep pressing [+] and [–] buttons at the same time, about 2 seconds, in the color adjustment mode.
(While the LEDs of [∴] and one of [R]/[G]/[B] buttons remain lit.)

▸ The LEDs of [R], [G], [B] and [∴] buttons will light simultaneously and momentarily. Then the picture color balance will be changed to the stored color balance, selected previously, and you can restart the adjustment.

User Data Clear [+ & − & ⏻]

(at the power ON only)



- Reset to the original standard settings.
  - When the power switch is turned ON while pressing the [+] button and [−] button together, all user settings will be deleted.
  - The original standard setting will still remain.

POWER SAVING SYSTEM

The following power saving functions are provided by the Hitachi Color Monitor CM2198/2098M.

1 Built-in Automatic Power Saving

An automatic power Saving function operates when no horizontal or vertical sync signal is supplied to the monitor.

2 The monitor will conform to Display Power Management Signaling proposed by VESA.

SPECIFICATIONS

CRT

CM2198M : 21 inches diagonal, 0.28 mm (horizontal : 0.24mm)dot pitch
CM2098M : 20 inches diagonal, 0.31 mm (horizontal : 0.27 mm)dot pitch
Invar shadow mask, Black matrix, Anti-Reflection coat, Short persistence phosphors.

Input Signal

Video : 0.7 Vp-p, Analog
Sync. : Separate H, V or Composite H/V
TTL level or Sync. on Green at 0.3 Vp-p

Synchronization

	CM2198M	CM2098M
Horizontal	: 30 - 90 kHz	30 - 90 kHz
Vertical	: 50 - 150 Hz	50 - 150 Hz

Resolution

	CM2198M	CM2098M
Horizontal	: Up to 1,600 dots	Up to 1,280 dots
Vertical	: Up to 1,200 lines	Up to 1,024 dots

Video Clock Frequency

BNC : 160 MHz (max)
D-SUB : 100 MHz (max)

Active Display Area

	CM2198M	CM2098M
Horizontal	: 385 mm	365mm
Vertical	: 290 mm	275mm

The active display area is changed according to the graphics board.

Color Temperature

Standard Color Balance 1 : 9300°K
Standard Color Balance 2 : 6500°K

Power Supply

AC 100-120/200-240 V, Automatically select.
Provided with Power Save Circuit.

Dimensions

CM2198MU 488 (W) × 474 (H) × 534 (D) mm
CM2098MU 488 (W) × 464 (H) × 525 (D) mm
Including Tilt & Swivel base.

Weight

CM2198MU 33kg
CM2098MU 28kg

Environmental Condition

	Operation	Storage
Temperature	: 5 °C to 35°C	-20 °C to 60°C
Humidity	: 10% to 80%	10% to 90%